

A BOX of PROMISE: DIGITAL EDUCATION REVOLUTION NSW

A critical question for creative arts teachers is how the use of digital technologies and information will support and enhance pedagogy in dance, drama, music and visual arts. Let's begin the discussion around this question in this article. We look forward to your comments and contributions as we develop materials to support you to use laptops in arts classrooms.

The relationship between students and computers is about to get a lot more personal with the DER NSW project distributing over 200 000 laptops across more than 500 schools over the next four years. Wireless-connected personal laptops will offer students mobility with frequent and immediate access to the internet and educational software at school and beyond. This unprecedented opportunity will transform teaching and learning.

The focus will never be on the technology. Rather, it's the pedagogy that counts. It's worth keeping in mind that laptops are only a tool. They're at our disposal to make learning easier, and more enjoyable and meaningful for children. (Holmes, 2008)

A learning environment where students have personal laptops can provide opportunities for a real-world, relevant education that can improve thinking and problem-solving skills and information and communication technology (ICT) skills. This is a move towards meeting community needs and students' expectations for the achievement of 21st century skills.

Students will have increased access to resources to support their learning and tools to plan and organise learning, communicate with their peers, teachers and the wider community and undertake collaborative tasks.

Technology and arts pedagogy

Arts pedagogy centres on practice and student learning models the work of artists. In the various arts subjects, students learn to explore, experiment, research, improvise, collaborate, problem-solve, reflect, discuss, critique and evaluate. They learn individually, and in small and large groups. Laptops for learning will provide a significant tool that students can use to support this learning.

One critical question, then, for creative arts teachers in the use of laptops is how the use of digital technologies and information will support and enhance knowledge, skills and values learned in each of the arts. We will begin the discussion around this question in this article, but the question can't be answered simply and we will rely on the input from many others to put forward some really effective uses for laptops. With this in mind we have developed an area of the website devoted to laptop learning and encourage you to contribute feedback and ideas through that area of the site at

http://www.curriculumsupport.education.nsw.gov.au/digital_rev/creative/index.htm

A voice box

The arts provide a means for students to have a voice – communicating their ideas, intentions and innovations. Arts syllabuses are built around communication and meaning. Laptops are a powerful tool for young artists to communicate.

Creating

The term ‘creating’ is used here as an umbrella term for making and composing practices in arts syllabuses. Students spend a significant amount of time in arts courses creating visual art, music, dance and drama ‘works’. Laptops will provide the means by which students can make digital works including:

- digital images
- videos
- animations
- soundscapes.

Software applications on the laptops will include multimedia applications including *Adobe Photoshop*, *Adobe Premiere*, *Audacity* and *Microsoft PowerPoint*, so that students will be able to manipulate text, image, audio and video to construct works. We also know that the laptops will function as a capture device with in-built camera and microphone, so this potentially makes video and audio manipulation accessible to every individual student.

Performing/exhibiting

Laptops will provide an exhibition space for sharing and viewing digital works. They will also be the conduit for publishing digital works in classrooms, on networks and on the web. Digital works can be shared locally and globally and the potential for sharing works with students all over the world is exciting.

Research and Critical study

The way that students access information for research has the potential to be completely transformed. Students have had access to the internet for a long time but teachers can now plan specific research and case studies with narrower or broader parameters and even individualise student pathways through research. Negotiating research studies with students will be made much easier when students have access to the same information as the teacher. Students will need to develop significant information literacy skills to effectively use the laptops for research and critical study.

Example: drama blog

In drama classroom processes such as playbuilding, students can use group blogging to record and reflect on their work. They can also use the blogging process to collaborate and explore specific symbols or elements that they can then explore ‘on the floor’ in their classroom workshops. In this way the blog becomes an aesthetically charged, dynamic space where students can co-create, capture and also simultaneously critique their playbuilding as it happens. The group blog can then act as an excellent record of the group’s work and can be used for assessment purposes.

Example: vocal recording and manipulation

In music, students can explore the range of sounds they can make with their voices. They can record sounds as they manipulate musical concepts such as dynamics and pitch. They can then

use the recorded sounds in compositions, introducing beats and loops to explore other musical concepts such as texture and duration.

A memory box

Each Stage 5 arts course encourages learning skills that require students to document (e.g. write, notate, collect), organise (e.g. annotate, catalogue, file) and retrieve (e.g. reflect, analyse, redraft, refine) ideas, experiments and research in the processes of making artworks.

In dance, this documentation is usually done in a process diary; in drama, in a logbook; in music, in portfolios; in visual arts, in a visual diary.

Using laptops, students have the capacity to retain learned information, document experiences and order that material so that it is readily retrieved. Students can choose a range of digital formats for presenting their documentation, or portfolio of works and experiments, including video and audio recordings, graphic representations, *PowerPoint* presentations, websites or *Word* and pdf files with hypertext or hypermedia links.

Example: dance process diary

A digital dance diary could include:

- definitions of terminology
- visual stimulus
- mind maps of ideas drawn from stimulus
- records of personal goals and planning
- ongoing notation of works in progress
- music samples
- sample floor patterns and elements of staging
- video of work in progress
- procedural recounts
- record of constructive advice and comments from audiences of works in progress
- reflection and evaluation of successes and challenges
- a record of URLs of websites related to dance
- research on dance artists and works.

A box of the world

The arts demand student engagement with artists and the world. Students will have contemporary exhibitions and excerpts of performances at their fingertips. Digital spaces and works will never replace real, live spaces and works, but laptops will mean that students can access historical and contemporary works remotely.

Students using laptops will have access to informative and interesting websites to generate discussion, consolidate knowledge, extend and enhance existing knowledge and link to new knowledge. Online galleries, images, videos and podcasts provide vast amounts of information greatly extending the resources generally available in the classroom. This also supports just-in-time learning allowing students to locate background information and complete homework, assignments and assessment tasks. Many teachers believe that students get more involved in in-depth research using laptops.

Accessing the world through laptops changes daily. Students will access and use accumulated media in new ways. The use of hypermedia for research is yet to be commonplace in arts classrooms and has the capacity to transform creative processes.

Example: The computer as a silent collaborator in visual arts research

Students individually search the web to build a network of ideas, thoughts, observations and connections. They 'roam', investigating a range of possibilities, perspectives and random connections to construct a network of ideas. A 'sketch' scaffold for research may include:

- selecting a theme/idea/word/object/artist quote/random thought/question
- creating a virtual mind map based on the theme/idea/word/object/artist quote/random thought/question
- listing ideas for artworks in a range of expressive forms
- collaborating with others to pursue the idea, e.g.
 - student and teacher
 - student and student
 - student and artist
 - student and audience
 - student and world.

A box of tools for honing multimodal literacies

The arts use media and forms of representation to communicate meaning. These include:

- concrete materials
- instrumentation
- movement
- voice and sound
- text
- image
- symbol
- formal and style conventions.

Each artform deals in multimodal literacies:

- Dance communicates through movement and the body, usually incorporating music and often incorporating visual imagery. Symbols are communicated through body shape and gestural, temporal, spatial and dynamic patterns.
- Drama can be seen as enactive multimodal learning where students collaborate to explore ideas, texts and symbols in embodied ways. Students experiment with dramatic elements such as tension, focus, movement, language and space to engage their audiences in the experience of the drama. They work with different performance styles and conventions as well as visual elements of production (such as costume, lighting and set design) to create and perform their drama.
- Music incorporates sound, instrumentation, body and stylistic interpretation as multi-modal expression. Students have to interpret layered aural meaning and form, together with symbolic notation and stylistic conventions of the performer.
- In Visual Arts, students apply visual literacy to 2D, 3D and 4D forms. 3D and 4D forms also incorporate sound, voice, body and movement. Combinations of modes are particularly evident in contemporary video and installation works.

In each of the arts, students develop the ability to read, understand, analyse, explain, critically evaluate and appreciate the ways in which texts built from different media are constructed and make meaning. Students are also encouraged to innovate, contest, and transform media.

Laptops allow students to engage directly with multiple forms of representation: image, movement, sound, animated image. They can:

- study symbol systems of digital texts
- study aesthetics and conventions of multimedia
- co-construct works in digital and real environments
- compare symbol systems and aesthetics in digital and real environments.

A box of rules for cyber citizenry

Students will need to understand some of the complexities of digital rights and intellectual property to ensure they work ethically within the laptop environment.

Third-party copyright is part and parcel of creating work. In arts classrooms we bring certain aspects of copyright to the attention of students. These include:

- appropriate use of traditional/cultural knowledge
- appropriation
- intellectual and moral rights of artists
- public domain and royalty free material.

The 'rules' for cyber citizenry for young digital artists need to be negotiated and discussed. In the expanded version of this article on our website we provide some further resources and reading to support you to implement these rules in your laptop classrooms.

References

Kist, W. *New Literacies in Action: Teaching and learning in multiple media* Teachers College Record Volume 107 Number 11, 2005, p.2537–2542

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For more information about the DER NSW project and regular news updates, go to:

detwww.det.nsw.edu.au/deptresources/majorprojects/laptops4learn/index.htm

To contribute to arts resources for the DER NSW project, go to

www.curriculumsupport.education.nsw.gov.au/secondary/creativearts/laptops/index.htm